INL News Release FOR IMMEDIATE RELEASE March 28, 2011

NEWS MEDIA CONTACTS:

Julie Ulrich, 208-520-1139, julie.ulrich@inl.gov Nicole Stricker, 208-526-5955, nicole.stricker@inl.gov

Editor's Note: Images of new partner facilities are available upon request.

Two new partners join Advanced Test Reactor National Scientific User Facility

IDAHO FALLS — Research into fuels and materials that could improve tomorrow's nuclear reactors just got more collaborative. Two new partners have been added to the Advanced Test Reactor (ATR) National Scientific User Facility (NSUF) based at Idaho National Laboratory (INL). The user facility now includes eight partner facilities in as many states.

Oak Ridge National Laboratory (ORNL) in Tennessee and the University of California, Berkeley, are the newest user facility partners. Such partnerships increase access to national irradiation and testing capabilities and provide greater flexibility to respond to user needs.

"The ATR National Scientific User Facility gives university and industry scientists unprecedented access to the nation's most capable nuclear research facilities," said Todd Allen, the user facility's scientific director. "We're pleased to count Berkeley's and Oak Ridge's unique capabilities among those available to our users."

The U.S. Department of Energy established the ATR NSUF in 2007. The goal: to assert U.S. leadership in nuclear science and technology and to attract new users such as universities, laboratories and industry to conduct research at INL's ATR and partner facilities. The arrangement advances the nation's energy security needs by supporting basic and applied nuclear research and development.

Test space within the NSUF is made available at no cost to external users whose projects are selected via a peer review process. INL's ATR, its post-irradiation examination capabilities, and the partner facilities offer some of the most advanced nuclear fuels and materials testing and examination capabilities in the country.

The new partnerships will make ORNL's High Flux Isotope Reactor (HFIR) and its associated capabilities available to the ATR NSUF users. The HFIR is a versatile, 85-megawatt isotope and test reactor that provides one of the highest steady-state neutron fluxes of any reactor in the world. Irradiation experiment facilities include a wide variety of test positions, a hydraulic shuttle and the capability for multiple instrumented target positions. Target fabrication, hot cell facilities for the examination of nuclear fuels and irradiated materials, the Radiochemical Engineering Development Center, and a set of special radiological laboratories at ORNL will also join the partnership. HFIR is operated by DOE, Basic Energy Sciences.

UC Berkeley also will bring several capabilities for examining irradiated material samples. Its facilities include a nano-indentation system for nanoand microscale hardness testing at ambient and elevated temperature and inert environments, positron annihilation spectroscopy, and warm sample preparation.

INL is one of the DOE's 10 multiprogram national laboratories. The laboratory performs work in each of DOE's strategic goal areas: energy, national security, science and environment. INL is the nation's leading center for nuclear energy research and development. Day-to-day management and operation of the laboratory is the responsibility of Battelle Energy Alliance.

Subscribe to RSS feeds for INL news and feature stories at www.inl.gov. Follow @INL on Twitter or visit our Facebook page at www.facebook.com/IdahoNationalLaboratory.

--INL-11-005---

News Release Archive